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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/676,247	09/30/2003	Theodore C. Tanner JR.	MSI-1348US	6389
22801 7590 06/22/2007 LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			EXAMINER ALMEIDA, DEVIN E	
			ART UNIT 2132	PAPER NUMBER
			NOTIFICATION DATE 06/22/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

Office Action Summary	Application No.		Applicant(s)	
	10/676,247		TANNER ET AL.	
	Examiner		Art Unit	
	Devin Almeida		2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the papers filed 4/09/2007. Claims 1-37 were received for consideration. Claims 1, 15 and 27 have been amended. Currently claims 1-37 are under consideration.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Response to Arguments

Applicant's arguments filed 4/09/2007 have been fully considered but they are not persuasive.

In response to applicant's argument with respect to 35 USC 112, applicants fails properly reply to the rejection by showing where the claims was described in the

specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear how to mix game audio signal, DVD audio signal, audio file signal, midi synthesis signal and other audio signal together and still be able to detect a watermark in this omnibus mixed signal. The specification page 11 line 1 – page 15 line 24 gives no information on how to combine all the different signals without destroying the watermark or hiding it so the it is undetectable among the omnibus mixed signal. Not all watermarks are robust so it is unclear no how to combine them and still detect the watermark. Applicant just says that a person of ordinary skill in the art knows that watermarks will remain intact after purposeful attacks by pirates and it is reasonable to assume that watermarks are also sufficiently robust to withstand mixing but does not point to how this mixing is taught in the specification.

With respect to claims 1, 15 and 27 that the Rhoads references fail to show a computer-readable medium having a program module with computer-executable instructions that, when executed by a computer, performs a method comprising: obtaining an omnibus signal comprising multiple input signals received from multiple different sources and mixed together (see column 10 line 65- column 11 line 1 i.e. the operating system constantly monitors all TCP/IP, on other internet, data received by the user's computer for the presence of watermarks (the IP packet from different sources are monitored and the packet for each source can come on mixed with other sources packets)), wherein when the omnibus signal is obtained it is unknown whether one or more of the input signals includes an embedded signal therein (see column 10 line 65-

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column 11 line 1 i.e. the operating system constantly monitors all TCP/IP, on other internet, data received by the user's computer for the presence of watermarks); testing the omnibus signal to determine if the omnibus signal includes an embedded signal (see column 10 line 65- column 11 line 1 i.e. the operating system constantly monitors all TCP/IP, on other internet, data received by the user's computer for the presence of watermarks).

With respect to claims 1, 15 and 27 that the Katayama references fail to show a computer-readable medium having a program module with computer-executable instructions that, when executed by a computer, performs a method comprising: obtaining an omnibus signal comprising multiple input signals received from multiple different sources (see paragraph 0122 i.e. when there are four kinds of input audio signals) and mixed together (see paragraph 0139-0141 i.e. when the four input audio signals A' to D' are received by the data-detection apparatus the third operation means adds all four signals and outputs the detection-target signal. Next the detection-target signal that is output from the third operation means is input to the signal-detection means and the signal detection means uses a second key for example to detect (extract) the addition signal (WM)), wherein when the omnibus signal is obtained it is unknown whether one or more of the input signals includes an embedded signal therein (see paragraph 0139-0141); testing the omnibus signal to determine if the omnibus signal includes an embedded signal (see paragraph 0139-0141 i.e. signal detection means uses a second key for example to detect (extract) the addition signal (WM)).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 9-11, 23-24, 34-36 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is unclear how to mix game audio signal, DVD audio signal, audio file signal, midi synthesis signal and other audio signal together and still be able to detect a watermark in this omnibus mixed signal. The specification page 11 line 1 – page 15 line 24 gives no information on how to combine all the different signals without destroying the watermark or hiding it so the it is undetectable among the omnibus mixed signal.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1-2, 4-8, 12-14, 15-16, 18-22, 25-28, 30-33 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Rhoads et al. (U.S. Patent # 6,442,285). With respect to claims 1, 15 and 27 that the Rhoads references fail to show a computer-readable medium having a program module with computer-executable instructions that, when executed by a computer, performs a method comprising: obtaining an omnibus signal comprising multiple input signals received from multiple different sources and mixed together (see column 10 line 65- column 11 line 1 i.e. the operating system constantly monitors all TCP/IP, on other internet, data received by the user's computer for the presence of watermarks (the IP packet from different sources are monitored and the packet for each source can come on mixed with other sources packets)), wherein when the omnibus signal is obtained it is unknown whether one or more of the input signals includes an embedded signal therein (see column 10 line 65- column 11 line 1 i.e. the operating system constantly monitors all TCP/IP, on other internet, data received by the user's computer for the presence of watermarks); testing the omnibus signal to determine if the omnibus signal includes an embedded signal (see column 10 line 65- column 11 line 1 i.e. the operating system constantly monitors all TCP/IP, on other internet, data received by the user's computer for the presence of watermarks).

With respect to claims 2, 16 and 28, the method further comprises locating one of the multiple input signals that has an embedded signal therein (see column 10 line 65 – column 11 line 14).

With respect to claims 4, 18, and 30, the method further comprises: locating one of the multiple input signals that has an embedded signal therein (see column 10 line 65 – column 11 line 14); indicating the located signal (see paragraph 20 line 41 – column 21 line 34).

With respect to claims 5, 19, and 31, the method further comprises: locating one of the multiple input signals that has an embedded signal therein; generating a notification based upon the locating (see paragraph 20 line 41 – column 21 line 34).

With respect to claims 6, 20, and 32, the method further comprises: locating one of the multiple input signals that has an embedded signal therein; impairing the located signal (see paragraph 20 line 41 – column 21 line 34).

With respect to claims 7 and 21, the method further comprises: locating one of the multiple input signals that has an embedded signal therein (see column 10 line 65 – column 11 line 14); muting the located signal when that signal is an audio signal (see column 6 lines 19-37 i.e. refuse to play the music).

With respect to claims 8, 22, and 33, the method further comprises: locating one of the multiple input signals that has an embedded signal therein (see column 10 line 65 – column 11 line 14); impairing one or more of the multiple input signals during the locating (see paragraph 20 line 41 – column 21 line 34).; when the one of the multiple input signals with an embedded signal therein is located by the locating, impairing only the located signal (see paragraph 20 line 41 – column 21 line 34).

With respect to claim 12, 25 and 37, the type of the one or more the multiple input signals is selected from a group consisting of image, audio, video, multimedia, software, metadata, and data (see abstract).

With respect to claim 13, an operating system comprising a medium as recited in claim 1 (see figure 1 and column 10 line 65 – column 11 line 14).

With respect to claim 14, a computing device comprising: an input device for receiving one or more input signals; a medium as recited in claim 1 (see figure 1 and column 10 line 65 – column 11 line 14).

With respect to claim 26, A computer comprising one or more computer-readable media having computer-executable instructions that, when executed by the computer, perform the method as recited in claim 15 (see figure 1 and column 10 line 65 – column 11 line 14).

With respect to claim 27 an embedded-signal detection system comprising a single embedded-signal detector configured to concurrently receive multiple input signals, each input signal potentially having an embedded-signal therein, wherein the detector is further configured to concurrently test the multiple input signals to determine if at least one of the multiple input signals has an embedded signal therein (see figure 1 and column 10 line 65 – column 11 line 14).

Claim 1, 3, 9-11, 15, 17, 23-24, 27, 29 and 34-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Katayama et al. (U.S. Patent Application Publication # 2003/0063570). With respect to claim 1, a computer-readable medium

having a program module with computer-executable instructions that, when executed by a computer, performs a method comprising: obtaining an omnibus signal comprising multiple input signals received from multiple different sources (see paragraph 0122 i.e. when there are four kinds of input audio signals) and mixed together (see paragraph 0139-0141 i.e. when the four input audio signals A' to D' are received by the data-detection apparatus the third operation means adds all four signals and outputs the detection-target signal. Next the detection-target signal that is output from the third operation means is input to the signal-detection means and the signal detection means uses a second key for example to detect (extract) the addition signal (WM)), wherein when the omnibus signal is obtained it is unknown whether one or more of the input signals includes an embedded signal therein (see paragraph 0139-0141); testing the omnibus signal to determine if the omnibus signal includes an embedded signal (see paragraph 0139-0141 i.e. signal detection means uses a second key for example to detect (extract) the addition signal (WM)).

With respect to claims 3, 17, and 29, the multiple signals are passed through and consumed by one or more computer-executable program modules, the method further comprises locating one of the multiple input signals that has an embedded signal therein, the locating occurring within about thirty seconds or less of consumption of the located signal (see paragraph 0120-0186 i.e. "it takes a certain amount of time, for example 15 seconds, for the detection mean to detect the electronic signal).

With respect to claims 9 and 34, each of the multiple input signals of the omnibus signal may potentially have an embedded signal therein , the multiple signals being

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mixed together into the omnibus signal and in a tree-like organizational structure with each of the multiple input signals is a "leaf" in the tree-like organizational structure and each "leaf" represents one of the multiple input signals that is unmixed with other signals (see paragraph 0120-0186).

With respect to claims 10, 24, and 36, if the testing finds an embedded signal in the omnibus signal, then the method further comprises performing a tree-search of the tree-like organizational structure to locate which one of the multiple input signals has an embedded signal therein (see paragraph 0120-0186).

With respect to claims 11, 24, and 36, the testing finds an embedded signal in the omnibus signal, then the method further comprises progressively "walking" up the tree-like organizational structure and testing the signal at each "branch" or "leaf" encountered in the walk up the tree-like organizational structure to determine if the signal at that branch or leaf includes an embedded signal therein (see paragraph 0120-0186).

With respect to claim 15, a method for dynamic detecting of robust embedded-signals in a multiple-signal environment, the method comprising: obtaining an omnibus signal comprising multiple input signals mixed together, wherein one or more the multiple input signals potentially may have an embedded signal therein; testing the omnibus signal to determine if the omnibus signal includes an embedded signal therein, wherein each of the multiple input signals of the omnibus signal may potentially have an embedded signal therein, the multiple signals being mixed together into the omnibus signal and in a tree-like organizational structure with each of the multiple input signals is

a "leaf" in the tree-like organizational structure and each "leaf" represents one of the multiple input signals that is unmixed with other signals (see paragraph 0120-0186).

With respect to claim 27, an embedded-signal detection system comprising a single embedded-signal detector configured to concurrently receive multiple input signals, each input signal potentially having an embedded-signal therein, wherein the detector is further configured to concurrently test the multiple input signals to determine if at least one of the multiple input signals has an embedded signal therein (see paragraph 0120-0186).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devin Almeida whose telephone number is 571-270-1018. The examiner can normally be reached on Monday-Thursday from 7:30 A.M. to 5:00 P.M. The examiner can also be reached on alternate Fridays from 7:30 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron, can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Devin Almeida
Patent Examiner
6/12/2007


KAMBIZ ZAND
SUPERVISORY PATENT EXAMINER